(54) CONTENTS SELLING SYSTEM

(57)Abstract:
PROBLEM TO BE SOLVED: To provide a system capable of dynamically changing selling prices including these of copied contents.
SOLUTION: An accounting condition reference address 101 and contents attribute information 102 are included in contents 100. A contents executing part 3, when executing the contents 100, accesses the accounting condition management part 1 of the address shown in the address 101, to show the contents attribute information 102. The management part 1 transmits to the contents executing part 3 the accounting condition which corresponds to the contents attribute information 102 shown. Based on the accounting condition obtained, the contents executing part 3 informs the account executing part 2 of the amount by which the contents 100 executed are used, in a way that can be specified by the user who used the contents. The accounting executing part 2 carries out an accounting process for the amount by which the contents are used.

CLAIMS

[Claim(s)]
[Claim 1]A contents selling system comprising:
Contents which have a fee collection condition reference destination address and
contents attribute information.
The fee collection condition Management Department which is provided
corresponding to said fee collection condition reference destination address, and
manages specific charge conditions corresponding to said contents attribute
information.
A fee collection execution part which performs accounting of the contents concerned
based on the amount used and fee collection conditions of said contents.
Perform said contents and said fee collection condition Management Department is
accessed based on said fee collection condition reference destination address before
execution, A contents executing part which acquires fee collection conditions
corresponding to contents attribute information of said contents from the fee
collection condition Management Department concerned, and notifies the amount
used and said fee collection conditions of performed contents to said fee collection
execution part.

[Claim 2]A contents selling system comprising:
Contents which have accounting execution application, a fee collection condition
reference destination address, and contents attribute information.
The fee collection condition Management Department which is provided
corresponding to said fee collection condition reference destination address, and
manages specific charge conditions corresponding to said contents attribute
information.
A fee collection execution part which performs accounting of the contents concerned

based on the amount used and fee collection conditions of said contents.

Perform said contents and by performing said accounting execution application, The accounting execution application concerned accesses said fee collection condition Management Department based on said fee collection condition reference destination address before execution of said contents, An application executing part for acquiring fee collection conditions corresponding to contents attribute information of said contents from the fee collection condition Management Department concerned, and notifying the amount used and said fee collection conditions of performed contents to said fee collection execution part.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention]This invention relates especially to the charging system about the contents selling system which sells contents, such as multimedia data.

[0002]

[Description of the Prior Art]The sale and circulation through media, such as CD-ROM, or the Internet of contents have come to be briskly performed as a personal computer and the Internet generally spread widely.

[0003]In the charging system of contents, many acquisition methods which perform one fee collection at the time of download or the beginning of using, etc. are seen at the time of distribution of a medium. When the charging system of an acquisition method considers the usage pattern that the execution function of contents performs contents by a network offline state, The accounting by the side of sale for which the user who purchased can use contents irrespective of network off-line and on-line when you like has a merit, such as it being easy and being.

[0004]

[Problem(s) to be Solved by the Invention]However, in the fee collection of the above-mentioned conventional acquisition method, it is not the exact fee collection reflecting the user's utilization quantity. That is, since a price will become to some extent big-ticket if premised on acquisition, for a user with little utilization quantity, it may result in paying many prices more than needed. The user with little utilization quantity who cannot get the income more than purchase prices from a user with much utilization quantity for a contents selling person refrained from purchase, and there was a problem of a purchase layer being limited. When price strategies, such as price reduction, were taken, it also had problems, like the difference of extreme terms of purchase arises between the user who purchased newly, and the user who purchased

in the past.

[0005]Although a charging system is considered that the optimal method changes with each cases of contents selling, In order to solve the above problems, a specific charge is possible as one of the charging systems, The charging system which can be applied to the use after it of the copy of all the contents included to the possibility of the dynamic price change by a contents selling person and the thing whose change of the fee collection conditions by the vender of contents has been distributed further is required.

[0006]There were some which are indicated by JP,9-73480,A "contents selling price accounting system and charging method" as art in which such fee collection conditions can be changed conventionally, for example. Although the art which can change the selling price dynamically is proposed according to a sales situation, what can be changed is a price at the time of distribution of a key, serves as fee collection of the acquisition method fundamentally, and is not satisfied with this art of the above-mentioned demand.

[0007]as other art by JP,11-85848,A "storage which stored the license distribution management method, the system, and the license distribution management program." The method of the specific charge charged at the time of use of contents and the art which can change the license service-condition document matched with each contents are proposed. However, it is what a change of a license service-condition document is made in this art by the input of the user who uses contents, and is performed only to the contents for use, The dynamic price strategy by the side of contents selling is not made possible to use of all the copies of a certain contents. It had the problem that it was complicated to need a license management substitute processing capability also for the user terminal side etc. as for composition.

[0008]

[Means for Solving the Problem]The next composition is used for this invention in order to solve the above-mentioned technical problem.

<Composition 1> Contents which have a fee collection condition reference destination address and contents attribute information, The fee collection condition Management Department which is provided corresponding to a fee collection condition reference destination address, and manages specific charge conditions corresponding to contents attribute information, Perform contents with the amount of contents used, and a fee collection execution part which performs accounting of contents based on fee collection conditions, and. Based on a fee collection condition reference destination address, the fee collection condition Management Department is accessed before execution, A contents selling system provided with a contents executing part which acquires fee collection conditions corresponding to contents attribute information of contents from the fee collection condition Management Department, and notifies the amount used and fee collection conditions of performed

contents to a fee collection execution part.

[0009]<Composition 2> Contents which have accounting execution application, a fee collection condition reference destination address, and contents attribute information, The fee collection condition Management Department which is provided corresponding to a fee collection condition reference destination address, and manages specific charge conditions corresponding to contents attribute information, Perform contents with the amount of contents used, and a fee collection execution part which performs accounting of contents based on fee collection conditions, and. By performing accounting execution application, accounting execution application, Based on a fee collection condition reference destination address, the fee collection condition Management Department is accessed before execution of contents, A contents selling system provided with an application executing part for acquiring fee collection conditions corresponding to contents attribute information of contents from the fee collection condition Management Department, and notifying the amount used and fee collection conditions of contents which were performed to a fee collection execution part.

[0010]

[Embodiment of the Invention]Hereafter, an embodiment of the invention is described in detail using an example.

<<Example 1>>

<Composition> Drawing 1 is a lineblock diagram showing the example 1 of the contents selling system of this invention. The system of a graphic display consists of the contents 100, the secret key 200, the fee collection condition Management Department 1, the fee collection execution part 2, the contents executing part 3, and the network 4.

[0011]The contents 100 called it multimedia data and the application program which were stored in CD-ROM which a contents selling person distributes, for example, and are provided with the fee collection condition reference destination address 101, the contents attribute information 102, and the contents body 103. The fee collection condition reference destination address 101 is an address of the fee collection condition Management Department 1 on the network 4, for example, is information expressed with URL (Uniform Resource Locator) on the Internet. The contents attribute information 102 is the identification information of the contents which show what kind of contents the contents 100 are, and is expressed with content ID. The contents body 103 is a main part of contents, such as a multimedia data body or a main part of an application program. The secret key 200 is a secret key of the public-key-encryption-ized method which a user holds, and is for carrying out an electronic signature to information, including a user's utilization quantity etc. which are notified to the fee collection execution part 2.

[0012]The fee collection condition Management Department 1 is the Management

Department which manages the fee collection conditions which the vender of the contents 100 registers, It has an address on the network 4, it has the fee collection conditions at the time of every contents 100, and when content ID is given from the contents executing part 3, it has the function to return effective fee collection conditions now. Here, fee collection condition ID for discriminating fee collection conditions from fee collection conditions, the information on an accounting object or a calculation method, and the information of the address of the fee collection execution part 2 are included.

[0013]The fee collection execution part 2 is a function part which performs accounting (fee collection calculation and settlement processing) to the user in response to the information which specifies a user, and the information on the utilization quantity of contents from the contents executing part 3, for example, is provided in settlement-of-accounts organizations, such as a credit company. The acquisition function of fee collection conditions required for fee collection calculation can provide the controlling function of the fee collection condition Management Department 1, and the same function also to this fee collection execution part 2, and a means by which a contents selling person registers using this function can realize it.

[0014]The contents executing parts 3 are the function part provided in the multimedia player, and a function part realized on the personal computer, and have the following functions as an executive operation function of contents, for example.

(1) The function which accesses the fee collection condition Management Department 1 via the network 4 based on the fee collection condition reference destination address 101 in the contents 100, passes the content ID of the contents attribute information 102 to the fee collection condition Management Department 1, and acquires effective fee collection conditions from the fee collection condition Management Department 1 now.

(2) The function to show a user the contents of the acquired fee collection conditions, and to receive specification of the fee collection conditions by a user.

(3) The function to perform the contents body 103.

(4) The utilization quantity can be computed by the ability to supervise the executed situation of the contents body 103, and a use user can specify fee collection condition ID contained in the information and fee collection conditions of the utilization quantity which is the target of fee collection under the fee collection conditions applied now, And the function notified to the fee collection execution part 2 by the method which can prove use by the user.

[0015]The method which a use user in case the contents executing part 3 notifies utilization quantity to the fee collection execution part 2 can specify, and can prove use by the user is realizable by the art of an electronic signature, for example. In this case, the user can input the secret key 200 at the time of starting of the contents executing part 3, and can be realized by the method of notifying the data which

performed the user's electronic signature to the information on fee collection condition ID and utilization quantity that the contents executing part 3 is contained in fee collection conditions to the fee collection execution part 2.

[0016]The network 4 is a transmission line for communicating with the fee collection condition Management Department 1 or the fee collection execution part 2, and the contents executing part 3 which performs the contents 100 in this example. It is a premise that the contents executing part 3, the fee collection condition Management Department 1 and the contents executing part 3, and the fee collection execution part 2 are connected in the network at least so that communication is possible. As the network 4, although it is the Internet, for example, about the composition, limitation in particular does not have transmission media, communications protocols, etc., such as a cable/radio.

[0017]<Operation> Operation of the contents selling system of the above-mentioned composition is explained hereafter. This example explains the case where the contents executing part 3 performs a user's electronic signature to the utilization quantity of contents, and the information on fee collection condition ID, and notifies to the fee collection execution part 2. Suppose that registration of the fee collection conditions to the fee collection condition Management Department 1 or the fee collection execution part 2 is already made.

[0018]If the contents executing part 3 starts, a user will input the contents 100 and the secret key 200 to the contents executing part 3 (the arrow of ✻✻ corresponds among a figure). Thereby, with reference to the fee collection condition reference destination address 101 in the contents 100, the contents executing part 3 is accessed via the network 4 to the fee collection condition reference destination address, and gives the content ID of the contents attribute information 102 (the arrow of ✻✻ corresponds among a figure).

[0019]By the given content ID, the fee collection condition Management Department 1 extracts the present fee collection conditions over those contents, and transmits this fee collection condition to the contents executing part 3 (the arrow of ✻✻ corresponds among a figure).

[0020]The contents executing part 3 shows a user the contents of the fee collection conditions. Here, depending on the operation form of this example, two or more effective fee collection conditions may be shown from the fee collection condition Management Department 1 about a certain contents now. In such a case, it is made to determine under which fee collection conditions the contents executing part 3 uses contents by showing the selecting means of the fee collection conditions applied to a user. If a user understands the contents of the fee collection conditions and determines application of fee collection conditions, the contents executing part 3 will perform the contents body 103 by the fee collection condition. On the other hand, when a user applies neither of the fee collection conditions, the contents body 103 is

not performed.

[0021]In the case of an operation form which restricts effective fee collection conditions to one about a certain contents 100 at a certain time, the contents executing part 3 applies unconditionally the fee collection conditions acquired from the fee collection condition Management Department 1, and it may be made to show this to a user. Or the contents executing part 3 can be made into the procedure of applying the last fee collection conditions unconditionally as finishing [recognition] when the fee collection conditions which the user chose from the same contents are saved and there is no renewal of fee collection conditions last time, and can also make the procedure of the application determination of the fee collection conditions by a user skip.

[0022]The utilization quantity which will be the target of fee collection under the fee collection conditions which have applied the contents executing part 3 now according to the execution if the contents body 103 is performed by the contents executing part 3. A user's electronic signature is performed and information and fee collection condition ID, such as (for example, utilization time in case the contents body 103 is music software), are notified to the fee collection execution part 2 (the arrow of ** is supported among a figure). As these notice forms, it is considered as the gestalt of notifying during execution of the contents body 103 to the timing which makes on-line the contents executing part 3 and the fee collection execution part 2, and notifies the amount of [at that time used] one by one, or execution of the contents body 103 ended.

[0023]The fee collection execution part 2 will perform fee collection calculation from the accounting information specified by fee collection condition ID, and the information on utilization quantity, if the notice from the contents executing part 3 is received. A user is specified by a user's electronic signature and settlement processing is performed. Since known processing can be applied to this settlement processing and it is directly unrelated to this example, that detailed explanation is omitted.

[0024]The contents executing part 3 performs them, whenever the above processings are directed to execution of the contents 100 from a user. Also when other users who have the same contents executing part 3 copy and use the contents 100, the same operation as the above-mentioned processing is performed.

[0025]When a contents provider changes fee collection conditions from a certain stage and reduces the utilized price of contents, the contents of the fee collection conditions of the fee collection condition Management Department 1 are changed. By this, All Users who uses the contents after it can use contents at a price reduced (the user who copied contents also including).

[0026]<Effect> When the contents executing part 3 performs the contents 100 as mentioned above according to the example 1, Since acquire fee collection conditions

from the fee collection condition Management Department 1, the contents body 103 is performed on this fee collection condition, that utilization quantity is notified to the fee collection execution part 2 and it was made for the fee collection execution part 2 to settle accounts, The contents selling person can perform a dynamic price change independently with distribution of contents about the contents sold by a specific charge method. Change of the fee collection conditions by a contents selling person can be made to apply also to use after it of the copy of all the contents also including a distributed thing.

[0027]<<Example 2>> The example 2 is provided with the function of the contents executing part 3 in the example 1 into contents.

[0028]<Composition> Drawing 2 is a lineblock diagram of the example 2 of a contents selling system. The system of a graphic display consists of the contents 300, the secret key 200, the fee collection condition Management Department 1, the fee collection execution part 2, the application executing part 5, and the network 4. Here, since the secret key 200, the fee collection condition Management Department 1, the fee collection execution part 2, and the network 4 are the same as that of the example 1, the explanation is omitted.

[0029]Although the contents 300 call it multimedia data and the application program which were stored like the example 1 in CD-ROM which a contents selling person distributes, they are provided with the accounting execution application 301 into the contents 300 by this example.

[0030]The accounting execution application 301 is an application program for realizing the same function as the contents executing part 3 in the example 1 by performing by the application executing part 5. Based on the fee collection condition reference destination address 302 in the (1) contents 300, namely, via the network 4 by performing by the application executing part 5, The function which passes the content ID of the contents attribute information 303 to the fee collection condition Management Department 1, and acquires effective fee collection conditions from the fee collection condition Management Department 1 now.

(2) The function to show a user the contents of the acquired fee collection conditions, and to receive specification of the fee collection conditions by a user.

(3) The function to perform the contents body 304.

(4) The utilization quantity can be computed by the ability to supervise the executed situation of the contents body 304, and a use user can specify fee collection condition ID contained in the information and fee collection conditions of the utilization quantity which is the target of fee collection under the fee collection conditions applied now, And the function notified to the fee collection execution part 2 by the method which can prove use by the user.

It realizes.

[0031]The fee collection condition reference destination address 302 and the

contents attribute information 303 are established as resource information referred to at the time of execution of the accounting execution application 301, and are the fee collection condition reference destination address 101 and the contents attribute information 102 in the example 1, and same information, respectively. The contents bodies 304 are main parts of the contents performed by the application executing part 5, such as a program body or a data body. The fee collection condition reference destination address 302 and the contents attribute information 303 may be formed in the inside of the accounting execution application 301.

[0032]The application executing part 5 is a function part for performing the accounting execution application 301 and the contents body 304, for example, is equivalent to the general-purpose operating system formed in the multimedia player or the personal computer.

[0033]<Operation> Operation of the contents selling system of the above-mentioned composition is explained hereafter. If the contents 300 are given to the application executing part 5, accounting execution application 301 will be performed first. Thereby, the accounting execution application 301 demands the input of a secret key from a user, and a user inputs the secret key 200 of a public-key-encryption-ized method (the arrow of ✳✳ corresponds among a figure). Then, the accounting execution application 301, With reference to the fee collection condition reference destination address 302 in the contents 300, to the fee collection condition reference destination address, it accesses via the network 4 and the content ID of the contents attribute information 303 is given (the arrow of ✳✳ corresponds among a figure).

[0034]The fee collection condition Management Department 1 extracts the present fee collection conditions over those contents by the given content ID, and transmits this fee collection condition to the accounting execution application 301 currently performed by the application executing part 5 (the arrow of ✳✳ corresponds among a figure).

[0035]The accounting execution application 301 shows a user the contents of the fee collection conditions. Here, depending on the operation form of this example, two or more effective fee collection conditions may be shown from the fee collection condition Management Department 1 about a certain contents now. In such a case, it is made to determine under which fee collection conditions the accounting execution application 301 uses contents by showing the selecting means of the fee collection conditions applied to a user. If a user understands the contents of the fee collection conditions and determines application of fee collection conditions, the accounting execution application 301 will permit execution of the contents body 304 by the application executing part 5 by the fee collection condition. On the other hand, when a user applies neither of the fee collection conditions, execution of the contents body 304 is not permitted.

[0036]In the case of an operation form which restricts effective fee collection

conditions to one about a certain contents 300 at a certain time, the accounting execution application 301 applies unconditionally the fee collection conditions acquired from the fee collection condition Management Department 1, and it may be made to show this to a user. Or the accounting execution application 301, It can be considered as the procedure of applying the last fee collection conditions unconditionally as finishing [recognition] when the fee collection conditions which the user chose from the same contents are saved and there is no renewal of fee collection conditions last time, and the procedure of the application determination of the fee collection conditions by a user can also be made to skip.

[0037]If the contents body 304 is performed by the application executing part 5, The accounting execution application 301 performs a user's electronic signature, and notifies the information, including for example, utilization time etc., and fee collection condition ID of utilization quantity which are the targets of fee collection under the fee collection conditions applied now according to the execution to the fee collection execution part 2 (the arrow of ** is supported among a figure). As these notice forms, during execution of the contents body 304, the accounting execution application 301 and the fee collection execution part 2 are connected on-line, and it notifies to the timing which notified the amount of [at that time used] with the predetermined cycle, or execution of the contents body 304 ended.

[0038]The fee collection execution part 2 will perform fee collection calculation from the accounting information specified by fee collection condition ID, and the information on utilization quantity, if the notice from the accounting execution application 301 is received. A user is specified by a user's electronic signature and settlement processing is performed.

[0039]The accounting execution application 301 performs the above processings, whenever execution of the contents 300 is performed. Also when other users copy and use the contents 300, the same operation as the above-mentioned processing is performed.

[0040]When a contents provider changes fee collection conditions from a certain stage and reduces the utilized price of contents, the contents of the fee collection conditions of the fee collection condition Management Department 1 are changed. By this, All Users who uses the contents after it can use contents at a price reduced (the user who copied contents also including).

[0041]<Effect> when the accounting execution application 301 is stored in the contents 300 and it performs the contents 300 as mentioned above according to the example 2, With this accounting execution application 301, first, acquire fee collection conditions from the fee collection condition Management Department 1, permit execution of the contents body 304 on this fee collection condition, and that utilization quantity is notified to the fee collection execution part 2, Since it was made for the fee collection execution part 2 to settle accounts, the contents selling person

can perform a dynamic price change independently with distribution of contents about the contents sold by a specific charge method. Change of the fee collection conditions by a contents selling person can be made to apply also to use after it of the copy of all the contents also including a distributed thing.

[0042]Since special composition for performing accounting is not needed, execution of the contents 300 is possible for the versatile OS of the user side equipment for performing the contents 300, etc. at any user side equipment. And even when making a specification change of the accounting itself, etc., it is effective in change of user side equipment being unnecessary and being able to cope with it by specification change of the accounting execution application 301 in the contents 300 to distribute.

[0043]<<Usage pattern>> Although it was considered as CD-ROM as an example of the distribution gestalt of the contents 100,300 in each above-mentioned example, it may not be limited to this and online software etc. may be what kind of distribution gestalten, for example. The game software etc. which are performed with various application programs executed with multimedia software also as the contents 100,300, such as video and music, a personal computer, etc. and a game special-purpose machine can apply all contents. A big effect can be acquired if it applies to the arbitrary software especially used as the contents 100,300 in the state where it was connected to networks, such as network waging-war type game software and a client function of Web application.

[0044]Also about user side equipment, not only in a multimedia player or a personal computer, If a game machine, personal digital assistants, such as a cellular phone and PDA (Personal Digital Assistants), etc. are the environment which can communicate to the fee collection condition Management Department 1 or the fee collection execution part 2, no matter they may be what devices, they are [that contents can be performed] applicable.

[0045]Although the use user in case the contents executing part 3 and the accounting execution application 301 notify utilization quantity to the fee collection execution part 2 could specify and the secret key 200 was used in each above-mentioned example as a method which can prove use by the user, they may be methods other than this. Between the contents executing part 3, or the accounting execution application 301 and the fee collection execution part 2, if reliability, such as user authentication, is guaranteed, it is not necessary to use means, such as encryption.

[0046]In each above-mentioned example, although it was made to notify as fee collection conditions also including the address of the fee collection execution part 2, this may be embedded beforehand at the contents executing part 3 or the accounting execution application 301. That is, a settlement-of-accounts organization may be set up fixed to use of a certain contents. By doing in this way, the fee collection conditions managed at the fee collection condition Management Department 1 can be simplified.

[0047]In each above-mentioned example, whenever the contents 100,300 were performed, acquired fee collection conditions from the fee collection condition Management Department 1, but. It may be the composition of providing the term of validity in fee collection conditions, and applying that fee collection condition in the case where change of fee collection conditions does not occur frequently if it is within this term of validity. As the term of validity, some fee collection conditions establish the conditions of being effective till what [month / what], and when the contents 100,300 are performed, and having passed over this time, they acquire fee collection conditions newly from the fee collection condition Management Department 1, for example. If it does in this way, even if it is off-line between the fee collection condition Management Department 1, it can operate about execution of the contents 100,300 within the term of validity.

[0048]During contents 100,300 execution, it does not notify on-line, but a notice term is provided, for example, and it may be made to notify within this term also about the notice of contents 100,300 utilization quantity to the fee collection execution part 2. If it does in this way, during contents 100,300 execution, it may not always be on-line, and even if it is a device which is not in the always-on connection environment to a network, execution of the contents 100,300 is possible.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1]It is a lineblock diagram of the example 1 of the contents selling system of this invention.

[Drawing 2]It is a lineblock diagram of the example 2 of the contents selling system of this invention.

[Description of Notations]

1 Fee collection condition Management Department

2 Fee collection execution part

3 Contents executing part

4 Network

5 Application executing part

100 and 300 Contents

101 and 302 Fee collection condition reference destination address

102, 303 contents attribute information

103, 304 contents bodies

301 Accounting execution application